

APPLICANT(S): FUHR, Gunter
SERIAL NO.: 10/591,068
FILED: August 30, 2006
Page 10

REMARKS

The present response is intended to be fully responsive to all points of objection and/or rejection raised by the Examiner and is believed to place the application in condition for allowance. Favorable reconsideration and allowance of the application is respectfully requested.

Applicants assert that the present invention is new, non-obvious and useful. Prompt consideration and allowance of the claims is respectfully requested.

Status of Claims

Claims 97-102 are pending.

Claims 97-102 have been rejected.

Claims 97, 99 and 102 have been amended. Applicants respectfully assert that the amendments to the claims add no new matter. It is noted that the amendment of claim 97 is supported at least, in the first paragraph of page 11. The amendment of claim 99 is supported at least on page 18, lines 12-18. Further, the amendment of claim 102 is simply a matter of form.

Claims 1-51 were previously canceled without prejudice or disclaimer.

Claim 52-96 have been withdrawn. Applicants reserve all rights in these to file divisional and/or continuation patent applications.

Remarks to the Abstract

In the Office Action, the Examiner objected to the Abstract because it contains the term “said”. The abstract was amended so as to replace the term “said” with “the”, and therefore should be acceptable.

APPLICANT(S): FUHR, Gunter
SERIAL NO.: 10/591,068
FILED: August 30, 2006
Page 11

CLAIM REJECTIONS

35 U.S.C. § 112 Rejections

In the Office action, the Examiner rejected claim 102 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The Examiner specifically objected to the use of the term “the sample” in claim 102, stating that there is insufficient antecedent basis for this limitation.

The Examiner rejected claim 99 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, the Examiner asserted that it is unclear whether the limitation in claim 99, drawn to the cells moving between neighboring cell carriers, is related to a property of the cells used in the method, the cells moving from one cell carrier to another as a result of the method, or cells being introduced or positioned to a cell carrier by letting the cell migrate from one carrier to another.

Claim 99 was further rejected under 35 U.S.C. § 112, first paragraph, since, according to the Examiner, while the specification is enabling for cells capable of migrating, it is not enabling for cells that are not capable of migrating.

Claims 99 and 102 have been amended to overcome the deficiencies noted by the Examiner. Claim 99 was amended to be directed to cells capable of migrating, thus clearly specifying the type of cells that enables the invention and clarifying the claim. Claim 102 was amended to relate to claim 100, upon which it was previously indirectly dependent, and by relating to “the cells” rather than to “the sample”. It is respectfully asserted that the foregoing amendment merely addresses matters of form and does not change the literal scope of the claim in any way or result in any prosecution history estoppel.

Applicants respectfully assert that these amendments render claims 99 and 102 proper under 35 USC § 112 and request that the rejections be withdrawn.

35 U.S.C. § 102 Rejections

In the Office Action, the Examiner rejected claims 97, 98 and 100-102 under 35 U.S.C. § 102(b), as being anticipated by Reich et al. (US 2002/0187504). Applicants respectfully traverse this rejection in view of the amendment to claim 97 and the remarks that follow.

Amended claim 97 recites:

Method for manipulating biological cells, comprising the steps:

- positioning at least one biological cell on at least one cell carrier ...
wherein the cell carrier has a lateral dimension within the range from
10 μm to 1 μm and a height within the range from 0.5 μm to
2000 μm .

Reich et al. does not disclose, teach or suggest claim 97, since a cell carrier with the lateral dimensions and the height recited in claim 97 is not disclosed in Reich et al. Instead, Reich et al. discloses much smaller nanowires as the cell carrier.

In light of the specific lateral dimension and height of the cell carrier recited in claim 97, the cell carriers used according to this claim are considerably larger than the cells adhering thereto or growing thereon. The surface properties of these cell carriers can be modified such that the cells remain in a predetermined region. The cells adhere and grow on only one side of the carrier (receiving element), which preferably has a flat or concave surface that allows a much better adhesion than that of the nanowires disclosed by Reich et al.

The large cell carriers required by amended claim 97 cannot be internalized by the cells as described for nanowires (Example 3 of Reich et al.). Further, due to the relatively large dimensions of said cell carriers of claim 97, no displacement of the carriers by thermal impacts (Brown's molecular movement) is possible (a problem that is known in regard of nano-objects) and the carriers will only be moved by defined forces applied from the exterior, in particular magnetic forces, and in the course of such a movement, the orientation of the carriers relative to the culture vessel remains defined and predictable. Contrary to this, nano-objects, such as the nanowires disclosed by Reich et al., which are subjected to magnetic forces as described in Reich et al., show uncontrollable gyration and spinning movements by

APPLICANT(S): FUHR, Gunter
SERIAL NO.: 10/591,068
FILED: August 30, 2006
Page 13

all axes. The large dimensions of the cell carriers according to claim 97 also enable coating the carriers with macromolecules in predetermined two-dimensional patterns that may be relatively complex if desired. This is not possible with the nano-wires disclosed by Reich et al.

Accordingly, Applicants respectfully assert that amended independent claim 97 is allowable. Claims 98 and 100-102 depend from, directly or indirectly, claim 97, and therefore include all the limitations of those claims. Therefore, Applicants respectfully assert that claims 98 and 100-102 are likewise allowable. Accordingly, Applicants respectfully request that the Examiner withdraw the rejections to amended independent claim 97 and to claims 98 and 100-102 dependent thereon.

Applicants respectfully request reconsideration and withdrawal of the rejections of claims 97, 98, and 100-102.

APPLICANT(S): FUHR, Gunter
SERIAL NO.: 10/591,068
FILED: August 30, 2006
Page 14

In view of the foregoing amendments and remarks, Applicants assert that the pending claims are allowable. Their favorable reconsideration and allowance is respectfully requested.

Should the Examiner have any question or comment as to the form, content or entry of this Amendment, the Examiner is requested to contact the undersigned at the telephone number below. Similarly, if there are any further issues yet to be resolved to advance the prosecution of this application to issue, the Examiner is requested to telephone the undersigned counsel.

Please charge any fees associated with this paper to deposit account No. 50-3355.

Respectfully submitted,

/Guy Yonay/
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